ELSEVIER

Aquacultural Engineering 22 (2000) 321–322

aquacultural engineering

www.elsevier.nl/locate/aqua-online

Contents of volume 22

May 2000 (Volumes 22, Numbers 1–2)

Introduction
R.H. Piedrahita (Davis, CA, USA) and J. Verreth (Wageningen, The Netherlands) 1

The design and operational characteristics of the CP&L/EPRI fish barn: a demonstration of recirculating aquaculture technology
T.M. Losordo, A.O. Hobbs and D.P. DeLong (Raleigh, NC, USA) 3

Developments in recirculation systems for Mediterranean fish species
J.P. Blancheton (Palavas-les-Flots, France) 17

Solids management and removal for intensive land-based aquaculture production systems
S.J. Cripps and A. Bergheim (Stavanger, Norway) 33

Use of floating bead filters to recondition recirculating waters in warmwater aquaculture production systems
R.F. Malone and L.E. Beecher (Baton Rouge, LA, USA) 57

Biodegradable polymers as solid substrate and biofilm carrier for denitrification in recirculated aquaculture systems
A. Boley, W.-R. Müller and G. Haider (Stuttgart, Germany). 75

Oxygenation and carbon dioxide control in water reuse systems
S.T. Summerfelt (Shepherdstown, WV, USA), B.J. Vinci (Ithaca, NY, USA) and R.H. Piedrahita (Davis, CA, USA). 87

Populations of heterotrophic bacteria in an experimental recirculating aquaculture system
N. Leonard (Montpellier, France), J.P. Blancheton (Palavas-Les-Flots, France) and J.P. Guiraud (Montpellier, France) 109

Biological phosphate removal in a prototype recirculating aquaculture treatment system
Y. Barak and J. van Rijn (Rehovot, Israel). 121

A model for predicting the quantities of dissolved inorganic nitrogen released in effluents from a sea bass (*Dicentrarchus labrax*) recirculating water system
P. Pagand (Montpellier, France), J.P. Blancheton (Palavas-les-Flots, France) and C. Casellas (Montpellier, France) 137

June 2000 (Volume 22, Number 3)

In-vivo fish sorting by computer vision
B. Zion, A. Shklyar and I. Karplus (Bet Dagan, Israel) 165
Effects of dissolved inorganic carbon availability on growth, nutrient uptake and chlorophyll fluorescence of two species of marine microalgae
E. Huertas, O. Montero and L.M. Lubián (Cádiz, Spain) 181
An integrated wastewater treatment system for land-based fish-farming
O.-I. Lekang (Ås, Norway), A. Bergheim (Stavanger, Norway) and H. Dalen (Ås, Norway). 199
Biofilm characteristics as affected by sand size and location in fluidized bed vessels
T.K. Nam, M.B. Timmons, C.D. Montemagno (Ithaca, NY, USA) and S.M. Tsukuda (Shepherdstown, WV, USA) 213
Power requirement of swimming in chinook salmon and Atlantic salmon and implications for food conversion and growth performance
R.J. Petrell (Vancouver, Canada) and R.E. Jones (New Westminster, Canada) 225

July 2000 (Volume 22, Number 4)

Optimizing multi-stage shrimp production systems
J.-K. Wang (Honolulu, HI, USA) and J. Leiman (Jakarta, Indonesia) . . 243
Direct electrochemical flow analysis system for simultaneous monitoring of total ammonia and nitrite in seawater
E.A. Moschou, U. Azpiroz Lasarte, M. Fouskaki, N.A. Chaniotakis, N. Papandroulakis and P. Divanach (Iraklion, Greece) 255
Survival, growth, metabolism and behaviour of *Clarias gariepinus* (Burchell 1822) early stages under different light conditions
S. Appelbaum (Sede Boqer Campus, Israel) and E. Kamler (Łomianki, Poland) 269
Size economies and optimal scheduling in shrimp production: results from a computer simulation model
X. Tian (HI, USA), P.S. Leung (Honolulu, HI, USA) and D.J. Lee (FL, USA) 289
Effects of background color on growth performances and physiological responses of scaled carp (*Cyprinus carpio L.*) reared in a closed circulated system
S.E. Papoutsoglou, G. Mylonakis, H. Miliou, N.P. Karakatsouli and S. Chadio (Athens, Greece). 309

Contents of volume 22 321